

Aft fairing strut, Wing To Body Fairing (WTBF) - Install procedure

DMC: BD500-A-J53-82-55-04AAA-720A-A

Language: sx/US

Issue no: 006

Issue Date: 2020/06/26

Title: Aft fairing strut, Wing To Body Fairing (WTBF) - Install procedure

Security classification: Class01

Responsible partner company: Bombardier/ 3AB48

Originator: Bombardier/ 3AB48

Applicability: 50006-50065, 55003-55143

Brex data module reference:

Quality assurance status: First verification: Table top

Reason for updating: To revise the procedure.

Intentionally left blank

Aft fairing strut, Wing To Body Fairing (WTBF) - Install procedure

References

Table 1 References

Data Module/Technical Publication	Title
BD500-A-J20-20-01-00AAA-720A-A	Lockwire - Install procedure
BD500-A-J20-20-03-00AAA-720A-A	Safety cable - Install procedure
BD500-A-J20-31-00-00AAA-711A-A	Torquing of threaded fasteners - Tighten procedure
BD500-A-J51-21-11-04AAA-259A-A	Corrosion inhibiting jointing compound - Corrosion prevention procedures
BD500-A-J51-26-00-01AAA-251A-A	Solvent cleaning - Clean with chemical agent

Common information

This data module gives the procedure to install the aft fairing strut (written as "strut" in this procedure). The struts are installed on the aft Wing To Body Fairing (WTBF).

Preliminary requirements

Production maintenance data

Zones	195	Aft wing to fuselage fairing, left side
Zones	196	Aft wing to fuselage fairing, right side
Access points	195GB	Panel
Access points	195HB	Panel
Access points	195JB	Panel
Access points	196HB	Panel
Access points	196JB	Panel

Required conditions

Table 2 Required conditions

Action/Condition	Data Module/Technical publication
Make sure that the aircraft is in the same configuration as in the remove data module.	
Obey the torquing of threaded fasteners standard practices.	BD500-A-J20-31-00-00AAA-711A-A

Action/Condition	Data Module/Technical publication
Obey the Corrosion Inhibiting Jointing Compound standard practices.	BD500-A-J51-21-11-04AAA-259A-A
Obey the solvent cleaning standard practices.	BD500-A-J51-26-00-01AAA-251A-A
Obey the lock wire install procedure.	BD500-A-J20-20-01-00AAA-720A-A
Obey the safety cable install procedure.	BD500-A-J20-20-03-00AAA-720A-A

Support equipment

Table 3 Support equipment

Name	Identification/Reference	Quantity	Remark
None			

Consumables, materials, and expendables

Table 4 Consumables, materials, and expendables

Name	Identification/Reference	Quantity	Remark
Grease, aircraft and instrument, gear and actuator screw	04-017	AR	
Lockwire, cres 0.032 in. (0.813 mm) diameter	05-004	AR	
Cable safety and ferrule kit, 0.032-0.038 in. (0.81-0.97 mm) nominal diameter, 18.0 in. (457.2 mm) length, corrosion and heat resistant steel	05-504	AR	
Ink marking	05-814	AR	
Non-chromate, corrosion inhibiting jointing compound	15-035	AR	

Spares

Table 5 Spares

Name	Identification/Reference	Quantity	Remark
Aft fairing strut, WTBF	CSN 53-82-55-04AAA001	1	

Safety conditions

None

Procedure

- 1 Install the strut (1), (2), (3), (4), (5), or (6) as follows:
Refer to Fig. 1.
 - 1.1 Make sure that the mating surfaces are clean and there is no contamination from paint, grease, or preservative fluids.
 - 1.2 Install the strut (5) or (6) as follows:
 - 1.2.1 Put the strut (5) or (6) in position.
 - 1.2.2 Apply the Corrosion Inhibiting Compound (CIC) (15-035) on the flat washer (9).
 - 1.2.3 Apply the grease (04-017) on the bushing (12) and bolt (28).
 - 1.2.4 Install the bushing (12), countersunk washer (11), bolt (28), flat washer (9), and nut (8).
 - 1.2.5 Apply the CIC (15-035) on the flat washer (9).
 - 1.2.6 Apply the grease (04-017) on the bushing (17) or (30) and the bolt (14) or (29).
 - 1.2.7 Install the bushing (17) or (30), countersunk washer (11), bolt (14) or (29), flat washer (9), and nut (13).
 - 1.2.8 Safety the nuts (8) and (13) with the cotter pins (7).
 - 1.3 Install the strut (4) as follows:
 - 1.3.1 Put the strut (4) in position.
 - 1.3.2 Apply the CIC (15-035) on the flat washer (21).
 - 1.3.3 Apply the grease (04-017) on the bushing (24) and bolt (22).
 - 1.3.4 Install the bushing (24), countersunk washer (23), bolt (22), flat washer (21), and nut (20).
 - 1.3.5 Apply the CIC (15-035) on the flat washer (21).
 - 1.3.6 Apply the grease (04-017) on the bushing (27) and the bolt (26).
 - 1.3.7 Install the bushing (27), countersunk washer (23), bolt (26), flat washer (21), and nut (25).

- 1.3.8 Safety the nut (25) with the cotter pin (19).
- 1.3.9 On the right and left side of detail view G, adjust the load on the tie rod of the support structure of the WTBF as follows:
 - 1.3.9.1 With an indelible ink pen (05-814), make a mark to index the tube body and the fork end of the tie rod at FS973.0, just outboard of LBL40.0 (left side) and RBL40.0 (right side).
 - 1.3.9.2 Remove the nut (20), washers (21) (23), bushing (24) and bolt (22) that attaches the lower end of the tie rod to the support structure.
 - 1.3.9.3 Remove and discard the safety cable (05-504) or lock wire (05-004) from the tie rod jam nut.
 - 1.3.9.4 Loosen the jam nut sufficiently to allow the tube body to turn.
 - 1.3.9.5 Apply the CIC (15-035) on the flat washer (21).
 - 1.3.9.6 Apply the grease (04-017) on the bushing (24) and the bolt (22).
 - 1.3.9.7 Turn the tube body clock wise or counter clock wise sufficiently to install the bolt (22), the washer (23), and the bushing (24), and the bolt (22) is free to turn.

Note

The amount of rotation of the tube body is +/- 1/8 of a turn.

- 1.3.9.8 Install the washer (21) and nut (20).
- 1.3.9.9 Turn the tube body clock wise or counter clock wise sufficiently so that the bolt (22) is no longer free to turn.
- 1.3.9.10 Torque the nut (20) to 160 - 190 lbf in. (18.08 - 21.47 Nm).
- 1.3.9.11 Install the cotter pin (19).
- 1.3.9.12 Torque the jam nut to 53 - 80 lbf in. (5.99 - 9.04 Nm).
- 1.3.9.13 Safety the jam nut and locking device with lock wire
- 1.3.9.14 Make sure that no threads of the inserts are visible from either ends.
- 1.3.9.15 If threads of the inserts are visible, do as follows:
 - 1.3.9.15.1 Remove and discard the tie rod.
 - 1.3.9.15.2 Install a new tie rod.

Note

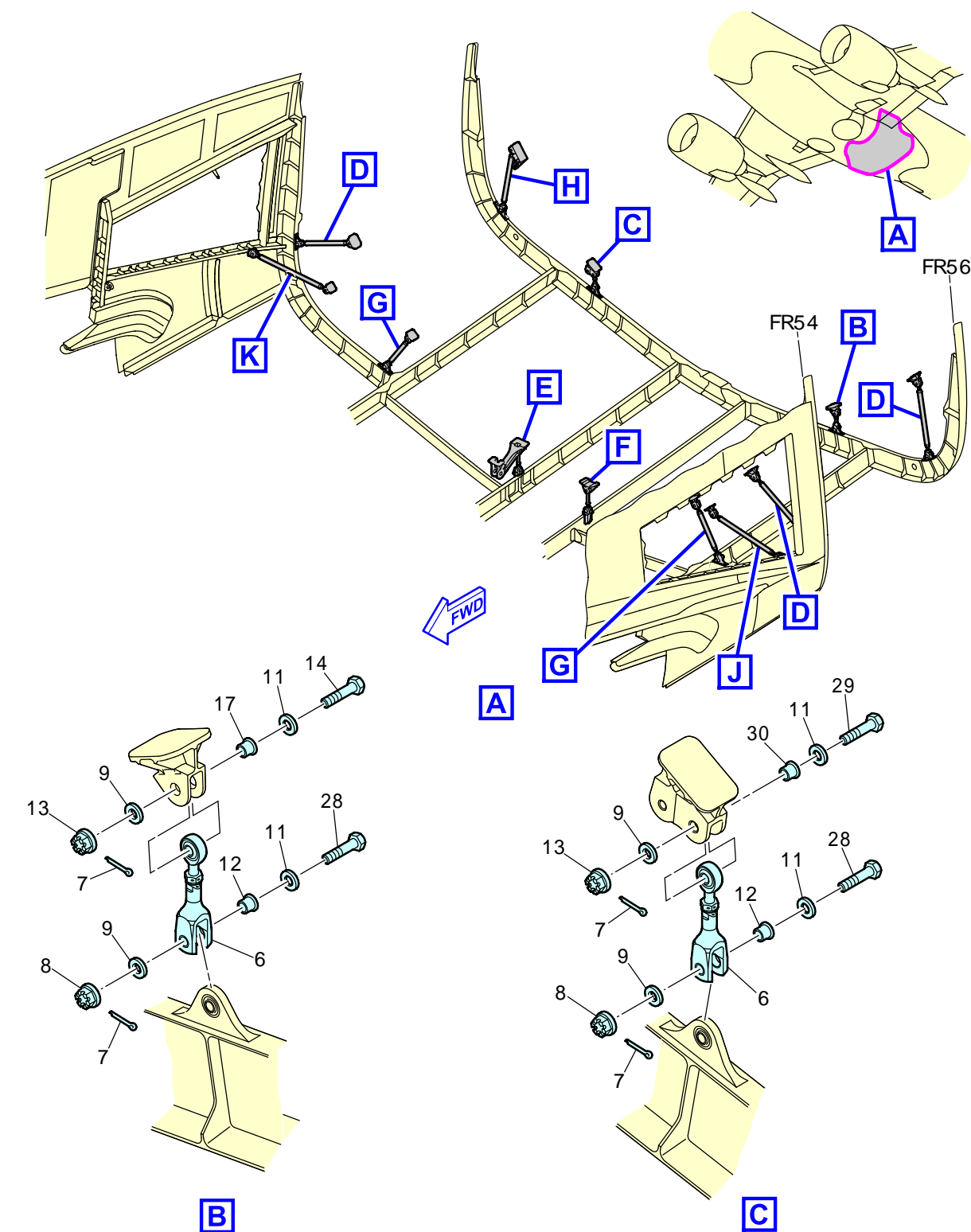
Adjust the load on the new tie rod as described in the previous steps.

- 1.4 Install the strut (3) as follows:
 - 1.4.1 Put the strut (3) in position.

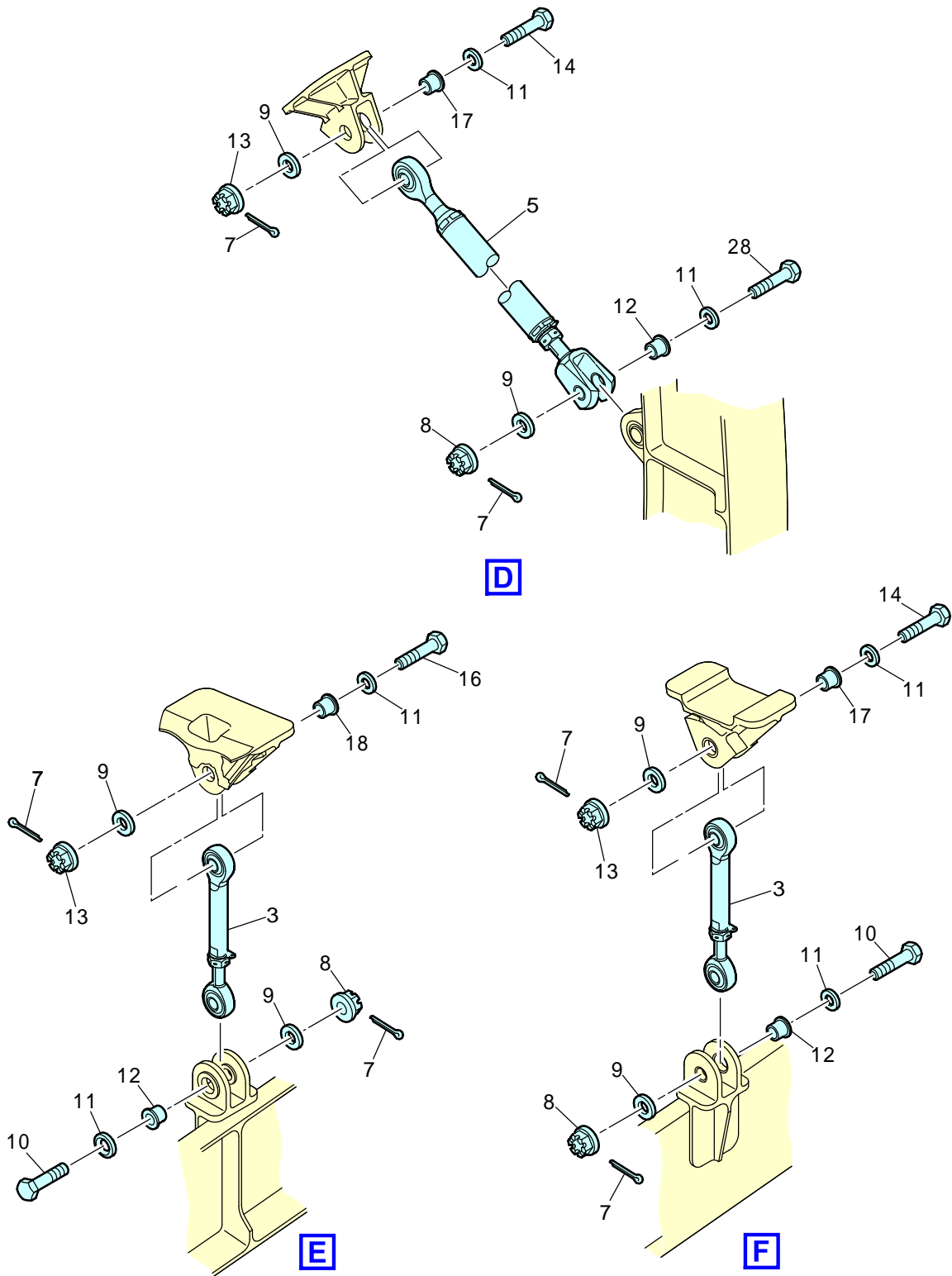
- 1.4.2 Apply the CIC (15-035) on the flat washer (9).
- 1.4.3 Apply the grease (04-017) on the bushing (12) and bolt (10).
- 1.4.4 Install the bushing (12), countersunk washer (11), bolt (10), flat washer (9), and nut (8).
- 1.4.5 Apply the CIC (15-035) on the flat washer (9).
- 1.4.6 Apply the grease (04-017) on the bushing (17) or (18) and the bolt (14) or (16).
- 1.4.7 Install the bushing (17) or (18), countersunk washer (11), bolt (14) or (16), flat washer (9), and nut (13).
- 1.4.8 Safety the nuts (8) and (13) with the cotter pins (7).
- 1.5 Install the strut (1) or (2) as follows:
 - 1.5.1 Put the strut (1) or (2) in position.
 - 1.5.2 Apply the CIC (15-035) on the flat washer (9).
 - 1.5.3 Apply the grease (04-017) on the bushing (12) and bolt (10).
 - 1.5.4 Install the bushing (12), countersunk washer (11), bolt (10), flat washer (9), and nut (8).
 - 1.5.5 Torque the nut (8) to 79.60 lbf-in (9.00 Nm).
 - 1.5.6 Apply the CIC (15-035) on the flat washer (9).
 - 1.5.7 Apply the grease (04-017) on the bushing (15) and the bolt (14).
 - 1.5.8 Install the bushing (15), countersunk washer (11), bolt (14), flat washer (9), and nut (13).
 - 1.5.9 Torque the nut (13) to 79.60 lbf-in (9.00 Nm).
 - 1.5.10 Safety the nuts (8) and (13) with the safety cable (05-504).

Note

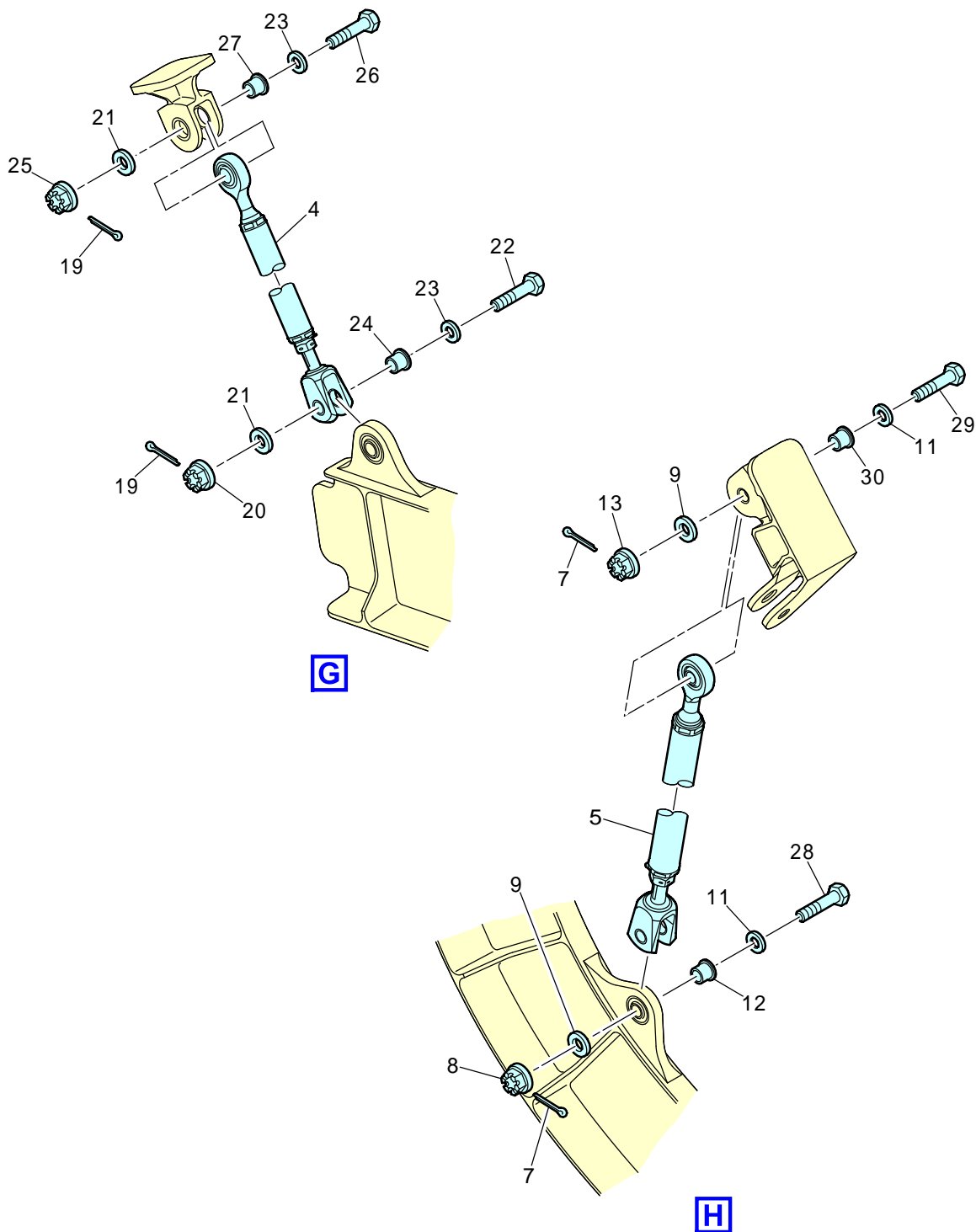
You can use the lockwire (05-004) as an alternative to the safety cable (05-504).



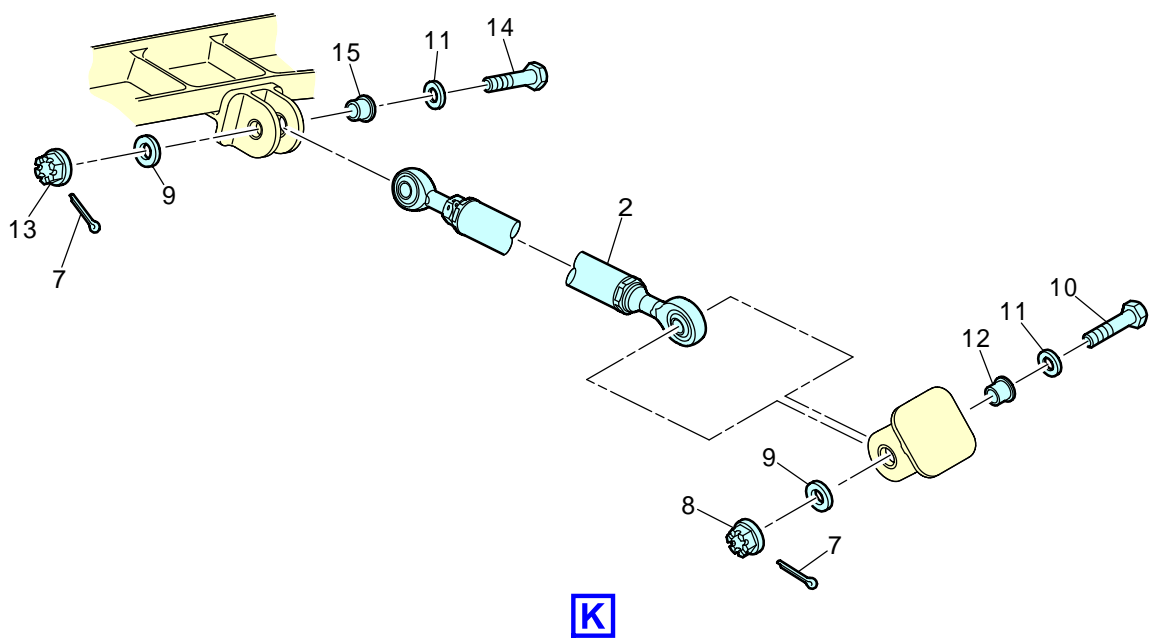
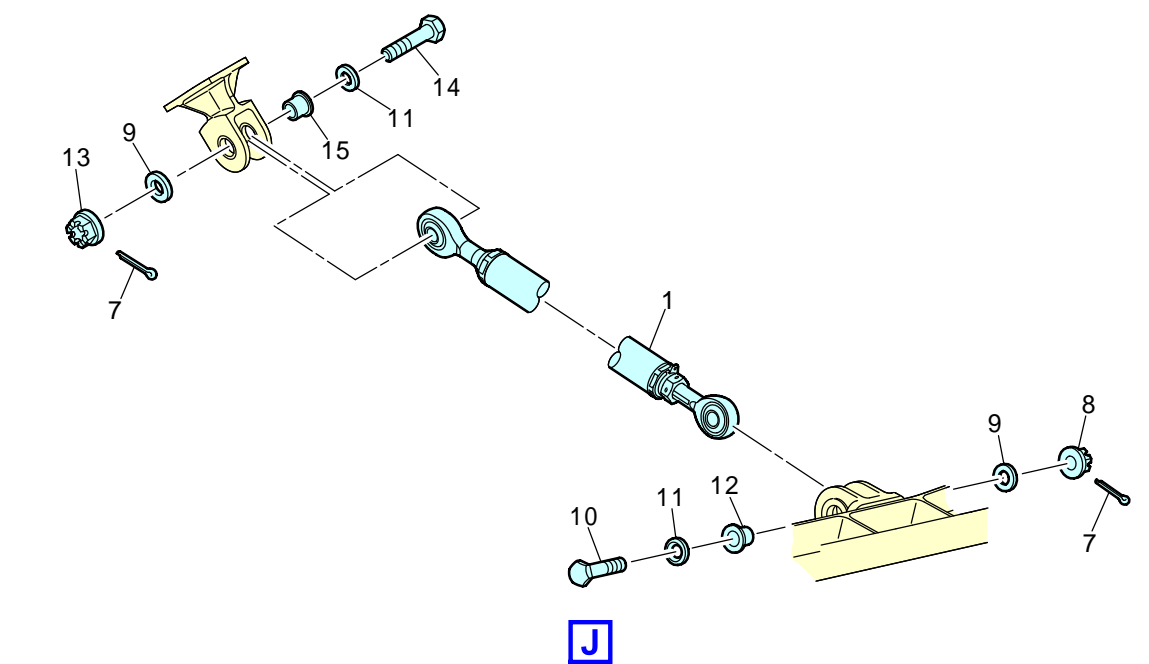
ICN-BD500-A-J538255-C-3AB48-28534-A-001-01
Fig. 1 Aft fairing strut, Wing To Body Fairing (WTBF) - Remove/Install
- (Sheet 1 of 4)



ICN-BD500-A-J538255-C-3AB48-28535-A-001-01
Fig. 1 Aft fairing strut, Wing To Body Fairing (WTBF) - Remove/Install
- (Sheet 2 of 4)



ICN-BD500-A-J538255-C-3AB48-28536-A-001-01
 Fig. 1 Aft fairing strut, Wing To Body Fairing (WTBF) - Remove/Install
 - (Sheet 3 of 4)



ICN-BD500-A-J538255-C-3AB48-28537-A-001-01
Fig. 1 Aft fairing strut, Wing To Body Fairing (WTBF) - Remove/Install
- (Sheet 4 of 4)

Requirements after job completion

Required conditions

Table 6 Required conditions

Action/Condition	Data Module/Technical publication
Remove all tools, equipment, and unwanted materials from the work area.	
Make sure that the access panels are installed. Refer to the access points table above for details.	